

AIRGRAM

DEPARTMENT OF STATE

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AGENCY FOR INTERNATIONAL DEVELOPMENT

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I. The Background Situation

a. Like many other tools of administration and public policy determination in Pakistan, statistics have had a significant British Indian heritage. This was reflected in the orientation of reporting systems which were established principally to measure and record data relating to property ownership, tax assessment, revenue collection and the fact-finding incidental to the maintenance of law and order and facilitation of communications. Recognizing the inadequacy of such a base for a developing national and that new measurements of economic advancement and of social needs and progress should be instituted and coordinated, the new Government of Pakistan (in 1948), convened a high level Statistical Reorganization Committee to face up to the problem. Its recommendations to the Cabinet, submitted through the then Development Board, resulted in the creation of the Central Statistical Office in 1950. A request for technical assistance to the U.N. resulted in prompt assignment of Mr. Abraham Aidenoff from the United Nations Statistical Office as first Statistical Advisor. In the six months of his tour, the organizational shape and basic program content of C.S.O. was established.

b. Realizing that statistical development in Pakistan would be a long pull and noting the US intention to assist in

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development programs on a broad front, Mr. William Leonard, Director of the UNSO, proposed in 1951 that technical assistance might be appropriately provided by the Foreign Operations Administration, using the facilities of the US Bureau of the Census for recruitment, participant training and technical backstopping. This idea was accepted and first implementation action under Project 037 was assignment of Mr. Thomas F. Corcoran as Statistical Advisor in December 1951.

c. While primary attention has been given to the Central Statistical Office as a focal point in coordinative activity, there has been increasing involvement throughout the life of the project with the Planning Commission (as prime market for economic series and national accounts data), with the Ministry of Finance (particularly at time of Central Budget preparation each year), with the Provincial Bureaus of Statistics (as coordinative and service agencies for the large grist of statistics which now are a provincial concern) and with other major statistical agencies, notably the ad hoc organizations for census taking (Population and Housing, Ministry of Home and Kashmir Affairs; Agriculture, Ministry of Agriculture).

Statistical development in Pakistan has continued to be supported by the United Nations and its member bodies, UNESCO, WHO, ILO and FAO who have provided both technician advisors and training fellowships. Colombo Plan countries including the U.S. have likewise contributed. Asia Foundation and Population Council, have helped, particularly in demographic research and development and Ford Foundation economic advisors have been consistent advocates of more resources for better numbers.

II. Objectives

a. Short range objectives in statistical development are often only relatively short. The complexity of developing standards and methods, securing resources, carrying operations through to compilation and publication even for a single study may take the better part of two years. In this light, short range objectives have been:

1. To establish a Provincial Statistical Bureau in West Pakistan.
2. To reorient and rationalize the program of the East Pakistan Provincial Statistical Board and Bureau of Commercial and Industrial Intelligence.

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3. To develop, in the Central Statistical Office, a National Sample Survey as a continuing vehicle of Government for securing, at early date and reasonable cost, information of known reliability on labor force, income and expenditure patterns, levels of education, rates of net increase in population, etc.
4. To conduct decennial censuses of Population and Housing.
5. To take a first Census of Agriculture in Pakistan.
6. To improve quality and timeliness of reports on current agricultural production.
7. To establish regular Censuses of Manufacturing Industries.
8. To conduct a first Census of Distributive Business.
9. To promote better and more efficient working space for CSO and its provincial counterparts.
10. To build a professional library in C.S.O.
11. To increase detail and scope of import and export data in foreign and inter-wing trade statistics.
12. To improve the Wholesale Price Index and retail price collection to the point where valid Cost of Living indices can be constructed.
13. To develop a program of Labour Statistics which will reflect employment, unemployment and under-employment, occupational wage and hour information, work stoppage, amenities and benefits of industrial employees, etc.
14. To improve vital statistics (birth and death occurrences) and to establish uniform institutional health reports.
15. To develop a minimal system of reporting school enrollment, teacher qualifications and school finances.
16. To prepare and publish estimates of national income in both current and constant prices and to establish a comprehensive system of National Accounts.

b. Longer range objectives of the project have been:

1. To evolve an integrated national statistical system with

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Central-Provincial and Inter-Ministerial responsibilities clearly defined by law and with the Central Statistical Office exercising firm co-ordinative control.

2. (For the first 5 years of the project)
To persuade the Government of Pakistan to post a competent Director-General to head the Central Statistical Office.
3. To support budgets for C.S.O. and other statistical agencies which would make possible improvements in current statistical series and would enable them to undertake development programs.
4. To establish scales of pay which would enable statistical agencies to attract and hold good people and a status which would assure hearing for their important contribution to Government's process of decision taking.
5. To work toward increased productivity in statistical operations through:
 - (a) work measurement techniques against reasonable standards of production.
 - (b) mechanization of appropriate tabulation to increase speed and accuracy.
6. In general to reduce time lag between reporting and data collection and final publication of results.
7. To develop a rational training program for professional statisticians and operating staff which would provide in balanced relationship:
 - (a) in-service training in government agencies.
 - (b) graduate and post-graduate instruction in statistical applications in the universities and research institutions of Pakistan.
 - (c) specialized training abroad (U.S. or third country).

III. Resources Committed

a. The U.S. since 1951 have contributed:

Technicians

4 Statistical Advisors (General)	10 man years
2 Industrial Statist. Advisors	3 man years
2 Survey Advisors	4 man years
1 National Income Advisor	2 man years
1 Sampling Advisor	2 man years
3 Provincial Stat. Advisors	7 man years
	<hr/>
	28 man years

By fiscal years the deployment of technicians has been:

1952 - 1	1958 - 3
1953 - 1	1959 - 3
1954 - 1	1960 - 3
1955 - 2	1961 - 4
1956 - 2	1962 - 4
1957 - 3	1963 - 4

Participant Trainees

From 1952 to 1961, a total of 26 Pakistanis received training in U.S. or third country in the following subject fields:

Industrial Statistics, Price Statistics, National Income, Vital Statistics, Statistical Publications, Machine Tabulation Programming and Operation, Sampling Methods, Census Geographic Preparation, Census Processing, Teaching of Applied Statistics. Except for 1958-59 when 6 were abroad for training, 2 were sent each year. There were no participants (under U.S. programs) in 1962.

Commodities

A total of \$204,000, mostly in fiscal 1958 and almost entirely for office machines to equip CSO and the Census of Agriculture. Minor purchases up to 1957 of books for the C.S.O. library.

Quantitatively, the Governments (Central and Provincial) of Pakistan may be said to have paralleled the efforts of U.S., U.N. and Colombo Plan in resource allocation for statistical development. Budgets of major statistical agencies have increased over three-fold in the last ten years. Taking only the recognizable statistical activities, Pakistan is credited with close to Rs. 6 million contribution. Most of this has gone to running statistical agencies, but some into expansion of institutional training and research and, increasingly (in Central Government and in West Pakistan), into facilities, supplies and equipment for carrying on censuses and surveys.

b. U.S. Funds Obligated:

	<u>Dollars</u>	<u>Local Currency</u>
Total thru 6/30/62	\$692,000	Rs. 405,000
FY 63	183,000	953,000

IV. Factors Accelerating or Inhibiting Progress

a. On the Pakistan side

1. Major difficulties

Foremost weakness from the inception of Pakistan has been the paucity of trained statisticians, most of whom in British India were Hindus and therefore opted for the Union of India. Early recognition of the magnitude of this need with willingness to bolster universities and training institutions would have helped. So would willingness to make short run sacrifice of "bodies on board" for the period of further training either at home or abroad. Such realization and willingness have been slow in coming.

Next most serious and most pervasive difficulty has been the administrative rigidity under which statistical agencies operate. Having for the most part the status of attached departments they are subject to secretariat routines of diarizing, rearrange reporting, and disposal of files after noting which have little to do with their major work of dealing with aggregates of numbers on pieces of paper. Even in the developmental work of statistics, the secretariat practice of "noting" files and passing for comment seldom clarifies issues. Subordinate service personnel, in effect, pass upon proposals and activities of technical division or agency heads, judging matters far beyond their competence. Thus, again and again developmental imperatives have been side tracked or delayed. Even after agreement "in principle" has been reached, the sanctioning process, where by funds are released against commitments, is a tortuous process requiring item by item re-justification for even the most obviously required administrative expenditure.

Other inhibiting factors relate to attitudes held in top levels of administration that statistics can be useful if manipulated to support a policy slant or to reflect progress on a program on which progress is called for. This implicit contempt for the integrity of statistics has tended to discourage and distract the few intellectually honest practitioners of the profession and to subvert those whose standards are not so well founded.

Another attitudinal holdover from earlier master-servant or caste relationships is found in reluctance of supervisory personnel to associate themselves physically with the routines of their office. Even first line supervisors try to establish themselves in private space and to promote inaccessability. Only sustained pressure from a superior could cause a division chief to run off a brief summary table on a desk calculator in emergency absence of a "proper clerk". This self-imposed separation from the work and from employees renders communication and inter-personal relationships just that much more difficult with the result that even good operational planners are often quite ineffective in meeting scheduled deadlines. It should be noted that exposure to Americans either in participant training or in advisory working relationship has done much to dispel this "separatist" attitude, particularly in field survey activities.

Maintaining continuity in statistical programs and momentum in any development endeavor has been seriously handicapped by rapid turnover of top civil servants in central ministries and provincial departments. Shortage of really able persons and an obsession that generalist administrators do more effective work if they aren't burdened with program understanding has led to almost frenetic transfer of C.S.F. Staff.

2. 2. Factors accelerating progress

Such accomplishment as can be noted on the Pakistan side is due largely to a small but dedicated group of professional statisticians who hold posts in central or provincial agencies and the universities. Though overworked and under paid they have learned to cooperate (not invariably, but increasingly) in sharing the scarce human resources available.

The single most significant increase in high level attention to statistics has come following the first (and temporarily disastrous) presentation of Pakistan's case in 1961 to the Consortium of countries invited to underwrite the Second Five Year Plan. Statistical documentation in series after series failed to provide assurances that the Government knew where it stood economically. Activation of the National Statistical Council followed with accomplishments noted in the next section.

b. On the US side

1. 1. Tactics facilitating progress

U.S. technical support of statistical development in Pakistan seems to have been most effective when it was specific and when there was willingness to risk/invest some dollars and rupees. To illustrate: There is an annual Census of Manufacturing Industries to show for the work of the Industrial Statistics Advisors; there is a National Sample Survey (still too dependant on U.S. technicians, but it's operating); there was a sample Census of Agriculture taken as a result of two and a half years work of a Sampling Advisor. That same census was planned to provide a wealth of cross tabulated data (instead of what could be summarized in a limited hand sort) because the U.S. was willing in 1958 to demonstrate the advantage of mechanization by bringing in modern IBM punched card equipment.

A withdrawal tactic of the Country Director in 1958 may be noted. The posting of a competent Director-General to the Central Statistical Office had been a conversation piece in the Government's plans from 1952, each Statistical Advisor expecting to have a counterpart to train and work with, and each ending up as Acting Director of C.S.O. with all the administrative and program complications which this involved. In the spring of 1958 US A.I.D. announced that no Principal Statistical Advisor would be recruited and no further assistance given the National Sample Survey until C.O.P. installed a qualified Pakistani as head of C.S.O. In October, 1958 Mr. M. A. Cheema was appointed as first Director-General.

2. How performance might have been improved.

In retrospect, it appears that the U.S. might have recognized the dimensions of the problem of statistical development and the limitation of human resources in Pakistan at least five years earlier and moved with more extensive technical advice, more physical aid to struggling research and training institutions and more opportunities to train local statisticians at home and abroad.

Specifically, U.S. advisors too long embraced the official GOP line that it wanted a strongly centralized statistical system on the model of the Dominion Bureau of Statistics in Canada, when in fact, experience in both pre- and post-partition period should have indicated that such concentration of authority was an unrealistic goal. Geographic corollary to this misconception was delayed attention to strengthening provincial facilities. Although each Principal Statistical Advisor from Mr. Corcoran on spent increasing time in Lahore and Dacca, it was not until 1957 that a full time Provincial Advisor (Mr. Prochnow) arrived and he divided time, approximately 70% West and 30% East. Since April 1961 there has been one Provincial Statistical Advisor in each wing and they are thinly spread amongst numerous subject, organizational and functional activities. The FY 1963 program calls for 3 in each province.

In view of the scant numbers of qualified and trained professional statisticians even now in Pakistan, it seems that the US A.I.D. should have been less tolerant about seeing promising participant trainees diverted to other (though often important) assignments upon return here.

Whether the advisors should have insisted on a higher quality standard of output in the statistical agencies from the beginning at the expense of broadening the offering of services and consequent awareness of statistics as an administrative tool, has been a moot question. Current line of the advisory team is to discourage new surveys and establishment of new reporting systems until those now operating are better in hand.

As A.I.D. and predecessor agencies have learned, the tie-in with the U.S. Bureau of the Census has been very worthwhile. The Bureau represents the leading statistical thinking in the U.S. government and maintains extensive and influential contacts throughout the world among professional government statisticians. The reputation of the Bureau has attracted and made available an exceptional calibre of technician and provided high quality of instruction to participant trainees. As demands for advisors seem to be increasing at almost geometric ratio (and not alone in Pakistan), it seems imperative that the Bureau now link up with selected U.S. universities or research organizations, at least to provide substantial panels of candidates for Bureau screening.

V. Accomplishments

a. Against Short run objectives:

1. The West Pakistan Bureau of Statistics was established in 1957 through joint effort of the Principal Statistical Advisor and the (Harvard Group) Economic Advisor to the Government of West Pakistan. It has had from the beginning a competent (U.S. trained) Pakistani Director. Its program is a primary and constructive concern of the Provincial Statistical Advisor.
2. Little accomplishment could be recorded toward reorienting the program of the East Pakistan Statistical Board during the lifetime of its former Director. New management now offers renewed hope.
3. National Sample Survey was inaugurated in 1959 and now has the experience of nine "rounds" of enquiries. To date the sample of 6500 households has been limited to rural areas. Beginning in May 1963 a new urban-rural sample will be used to collect labor force, income and expenditure data and to note changes in household composition (for migration patterns and net population increase).

4. Decennial Censuses of Population were taken in 1951 and (with a Census of Housing) in 1961. U.S. advisory assistance in planning, though offered for both "big counts", was little utilized. A limited number of participants (one of whom became the third Commissioner) went abroad for U.S. Census training in the inter-censal period. The current Principal Statistical Advisor is, since May of 1962, considered by the Ministry of Home and Kashmir Affairs as Census Advisor. With the Acting Commissioner he shares technical responsibility for the publication program, 5 bulletins (now all released) and 77 bound volume reports (16 now published).
5. After a bob-tailed Census of Livestock in West Pakistan in 1955, a full scale Census of Agriculture was planned for 1959 but cut back to a still extensive sample, which was completed in both East and West Pakistan in 1960. Preliminary estimates were promptly issued. Final tabulations (unconscionably delayed), will still provide useful information. The Census has been compiled on US A.I.D. purchased IBM equipment. U.S. advisors have helped on organizational planning, sample design, and analysis. Early and effective counsel on tabulation operations was given by a Colombo Plan advisor.
6. More timely crop reports, directly mailed and machine tabulated, are now produced by the West Pakistan Bureau of Statistics through sustained effort of the Provincial Statistical Advisor. His colleague in East Pakistan has personally organized and trained the technical staff of the Bureau of Agricultural Statistics who are now conducting sample surveys of acreage and harvest yield for all major crops. The Bureau Director goes for degree program training in the U.S. this year.
7. Regular annual Censuses of Manufacturing Industries have been taken by the Central Statistical Office since 1954, (changed to biennial in 1961).
8. A first Census of Commercial Establishments in urban centers of Pakistan has been undertaken by C.S.O. in 1963 in cooperation with the provincial Bureaus of Statistics. List-enumeration has been completed for Hyderabad and Karachi.

9. After brief improvement in 1957-60, when CSO occupied two floors of a modern office building, the space situation for all statistical agencies retrogressed to probably the poorest in all Asia. Just this winter 1962-63, the West Pakistan Bureau has moved into a new building well suited to requirements of its new data processing center. Total space, however, is barely adequate. Any expansion will require additional construction.
10. In spite of setbacks the C.S.O. library has continued steady growth through U.S. tech. assistance and Asia Foundation gifts and U.N. acquisitions. It badly needs a professionally trained librarian (now under recruitment) but has profited from the recommendations of the Library Advisor of the University of Southern California Public Administration Group.
11. Steady progress has been made on improving quality and timing of trade statistics, thanks in part to use of the U.S. purchased IBM equipment.
12. The revised Wholesale Price Index was published in January 1963. Good Cost of Living Indices wait on at least two rounds of household interviews on the new urban-rural sample, realistically will not be constructed before 1965.
13. A patchwork of central-provincial activities has produced little dependable manpower data. Establishment surveys of the Ministry of Labour (now discontinued) are worth building on. Household sample of the same agency twice repeated, 1955 and 1959, is of doubtful validity. National Sample Survey is best hope for solid labour force data.
14. Official recording of birth and death events is most incomplete. CSO (under Population Council sponsorship) is now conducting a methodological study of population growth estimation techniques which could provide a basis for sound intercensal population estimates. The Survey Advisors have contributed to both procedures and standards of this survey. The current WHO Health Statistics Advisor has recommended a system of uniform reporting from dispensaries, out-patient clinics and hospitals. Chances of early acceptance and installation are dubious.

15. Educational statistics being collected are too little, too late, and not at all comparable. A UNESCO Advisor (sixth in five years) has developed a reporting program which still needs implementation.
16. The important area of National Accounts has had lots of assistance, - a full time U.S. advisor in 1956-58, 4 participant trainees to U.S. (none of whom are now working in the field), an Expert Advisory Committee on National Accounts who made specific recommendations for conceptual improvements. The National Accounts Division of CSO still needs professional leadership, staff augmentation and training. Strengthening of basic series, will, of course, be a prerequisite.

b. Against long run objectives.

1. Such program and administrative beach heads as C.S.O. have made, have been aided by high level committees, notably the Statistical Advisory Committee of 1955 and the Statistical Policy Committee which operated in 1958. Without continuity, however, nothing approaching an integrated national system evolved. Starting again in the light of the new Constitution's delineation of powers, a National Statistical Council was established in 1962 to bring organizational order out of overlapping jurisdictions. At its most recent meeting, the NSC accepted a comprehensive Draft General Statistics Act recommended by its Technical Advisory Committee. After appropriate vetting by the Ministry of Law, the N.S.C. will sponsor this legislation before the National Assembly.
2. After leaning on UN and US advisors for seven years, the Government seems now to have accepted full responsibility for administration and direction of C.S.O. The present able Director-General, Lt. Colonel Nazir Ahmed, has served since Mr. Cheema's transfer in 1959.
3. Although total budgets of statistical agencies have shown a satisfactory increase (X10% in 10 years), the attrition and delay of the sanctioning process has frequently left them with more rupees than they can efficiently spend and with needed improvements unattained. Aggregate of field and office staff (not counting temporary Census Organizations) is 680 but this impressive total hides weakness or vacancy at critical professional posts.

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4. Draft recruitment rules which would have improved the pay and status of statisticians in government service have never been promulgated. The recommendations in the Report of the Pay and Services Commission, likewise seem to have little prospect of acceptance. The Deputy Chairman of the Planning Commission and the Principal Statistical Advisor have recently proposed emergency approval by the Minister of Finance of flexible pay rates needed to recruit for posts of Deputy Director and above in a 3 years statistical expansion program.

5. Building on a modest pilot effort in 1957 which put clerical operations of the Price Statistics Division of C.S.O. on standard, the agency has now acquired a trained Q & M technician who is in process of establishing work measurement techniques with reasonable standards of production. Since the technician is frequently diverted to other staff assignments, progress is slow. Processing operations of both large censuses (Population and Agriculture) have been held to fairly tight production standards. All current work of any volume in the Central Statistical Office and in the Provincial Statistical Bureaus is handled on punched card tabulating equipment. C.S.O. and the West Pakistan Bureau have modern IBM hardware. The East Pakistan Bureau has obsolete Powers-Samas sorters and tabulator. Compilation of the Census of Agriculture has been well mechanized but the great bulk of the Population Censuses (both 1951 and 1961) have been tabulated by hand sort.

6. Average time lag of 3 months between receipt of currently reported data and its publication has been reduced to 3-4 weeks in the C.S.O. partly due to better work scheduling, partly through having their own reproduction unit. Gains in timeliness in the Provincial Bureaus of Statistics are also heartening. All take too long to process and publish results of sample field surveys, however.

7. Foreign Training

Of the total of 39 who have gone abroad for study (26 in U.S. programs; 13 in Colombo Plan, UN or other sponsored efforts), slightly more than half are assigned to posts where they are demonstrating value of their training. In part this is due to selection without clear advance understanding as to future role of the

participant; in part to the overall shortage of trained and able staff and their vulnerability for proselytizing efforts from agencies who can top the pay of professional statisticians.

In-service Training

Half hearted attempts at in-service training in C.S.O. have now been succeeded by a comprehensive program at all levels. It lacks, however, a full time Training Officer. One who received his training for this purpose in the Phillipines in 1961-62 has returned but because of staff shortage elsewhere has been Acting Chief, Coordination and Development Division.

Institutional

The Universities of Dacca and the Punjab continue to turn out M.S.s and M.Sc's in Statistics with much theory and little training in the discipline of research applications. The East Pakistan Provincial Advisor has worked tirelessly with a small but promising group at the University of Dacca (Statistical Survey Research Unit) which now seems ready for upgrading to a research and training institute. The bulk of U.S. controlled rupees in the FY 1963 project are committed to aid the establishment of this Institute. The West Pakistan Provincial Advisor has (a) given lectures in sample design at the Institute (Dept) of Statistics, U. of the Punjab, (b) recommended a Fulbright Program visiting professor for the Institute in 1963-64, and (c) worked with the sponsoring Asia Foundation representative to reorientate the program of the Social Sciences Research Centre to offer more extension training for West Pakistan government statisticians. The Principal Statistical Advisor has worked with the faculty of the Institute of Development Economics in Karachi, steering several of C.S.O. and other statistical agency staff there for advanced training. He has also assisted in developing instructional materials for the statistics courses of the Institute of Business Administration, University of Karachi and is on the Advisory Committee on Curriculum for the new Department of Statistics at the University.

VI. ~~Appraisal by~~VI. Appraisal by Reporting Technical Division

a. Actual rate of progress compared with expectations. Statistical development is not a phenomenon which lends itself to terminal delineation. When, e.g. was the U.S. statistically "developed", or is it yet? No one of the Statistical Advisors in writing their terminal reports have foreseen statistical development in Pakistan as "just around the corner." On the contrary each one seems to have left a lengthier agenda of unfinished work on more developing fronts to his successor. While this might be viewed as a manifestation of Parkinson's Law, it is not unreasonable to expect that a developing nation of such size, beginning as far behind and as recently as Pakistan, has a lot of catching up to develop the measures on which a modern society must depend. Dr. Irene Taeuber, here in 1960 for the Population Council, observed that statistical advancement in Pakistan seemed about at the stage that it was in the U.S. during the late 1920's - before the national planning requirements of the New Deal had manifested themselves. It was a charitable comparison and was so received.

b. Significance for national development

A good measure, in fact, of the adequacy of Pakistan statistics is the quantitative base available for authors of the Third Five Year Plan. As may be noted from the preceding sections on Objectives and Accomplishments, there is marked room for improvement. Better indices of both agricultural and industrial productivity are required, data on capital formation, on manpower utilization, on the distributive business sector, and basic reporting series on progress in practically every Plan target area. As might be expected the most vehement and eloquent pleaders for statistical improvement and more resources for statistical agencies are the Planning Commission and their economic advisers who have the responsibility for writing the next Plan.

c. Significance of Findings for future activity

The lessons from ten years operation of this project in Pakistan seem to indicate that awareness of expanding needs may fall behind well intentioned but too strictly limited efforts. The primary short fall is in number of competent trained statisticians on site to staff the agencies charged with producing better numbers. The U.S. (with all the cooperation they can muster from other free nations and the UN), should concentrate in the next 3 years on an impact training program to produce more of the statistical leadership needed. First priority should go toward developing local institutions as practical training schools because (a) they're here, and (b) their development establishes a permanent resource for meeting professional needs in Pakistan. Advisors needed to strengthen and vitalize the program of these universities and institutes should be made available and key Pakistani staff should be sent abroad as participant trainees when it is clear that their contribution on return will be significantly enhanced. Second priority should go to in-service training within the statistical agencies themselves. Technician advisors can make an important contribution here as, for example, a Tabulation Systems Advisor who trains programmers and machine operations supervisors or a Clerical Staff Training Advisor who conducts (and who demonstrates how to conduct) classes in editing, coding, tabular presentation, etc. Again, participants may be sent out for training abroad but only where it is determined that they are suited to become trainers themselves on return.

On the side of the Pakistan Government there needs to be firm resolution toward insulating and protecting this resource of trained trainers. While it may be necessary to "freeze" such personnel at times, it will be far better to improve the conditions of service so that tangible incentives will bolster the spirit of dedication which must always be a prime motivational force for good teachers.

The project management and (increasingly) the Pakistani statisticians have held to the view that sound sampling surveys were the best answer to many statistical questions which would take too long and cost too much to answer via complete censuses or full reporting systems. The advisory team have, since 1956, had at least one member with background in mathematical statistics and practical knowledge of scientific sampling techniques. The present Provincial Advisors both have such competence and future recruitment should take account of this desideratum.

The need for more sophisticated analysis of survey data and the requirement for faster processing of the mass of material collected in decennial or quinquennial censuses must lead Pakistan into the computer age within the next five to seven years. Because of the lead time involved for procurement of equipment, training of programmers and of maintenance engineers, decisions on scope and range of such activity should be shaped in the next fiscal year. The Technical Advisory Committee of the National Statistical Council has recommended a policy of coordinated plan and purchase in order to avoid the waste in use of non-compatible equipment. The Governments of Pakistan should be encouraged to undertake feasibility studies of requirement and capacity and A.I.D. might profitably supply a short term consultant to guide such study. With the hope and expectation that electronic data processing will become a way of statistical life, the Central and Provincial Governments should be encouraged to assume financing of such equipment from the beginning. A.I.D. could then properly aid in training through "on location" advisor-teachers and through occasional specific participant training.

VII. Mission Director's Concurrence or Comment

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ATTACHMENTBALANCE SHEETDevelopment of Statistical Services

Components	1951 Status	1963 Status
A. <u>Basic Legislation</u>	<p>Only general ordinance was Factories Act of 1934 under which labour and (some) industrial production data would be collected under compliance provisions. There was also the ad hoc Act for taking Human Census, 1951 and a patchwork of gazetted orders of the Provinces and States.</p>	<p>After many drafts and long discussion, the National Statistical Council in its most recent meeting accepted a comprehensive General Statistics Act recommended by its Technical Advisory Committee. After appropriate vetting by the Ministry of Law, N.S.C. will sponsor this legislation before the National Assembly.</p>
B. <u>Statistical Organization</u>	<p>1. <u>Coordinating Body</u> None. The newly established CSO was adjured to affect coordination but given no authorities.</p>	<p>After high level committee efforts (Statistical Advisory Committee, 1955 and Statistical Policy Committee 1958) which produced guidelines but no authority, there was a hiatus till the new constitution provided delineation of Central-Provincial powers. In 1962 the National Statistical Council was established as continuing body with authority to review programs and eliminate duplication of activity.</p>

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Components	1951 Status	1963 Status
2. <u>Statistical Agencies</u>	C.S.O. and the East Pakistan Provincial Statistical Board and Bureau of Commercial and Industrial Intelligence were the only general purpose agencies, most Central Ministries had one or more statistical cells. Directorate of Industry in East Pakistan had a statistical section. There was also in 1951 a temporary Population Census Organization.	C.S.O. and the East Pakistan Bureau were joined in 1957 by a West Pakistan Bureau of Statistics. Under decentralization policy of Government the activities of most statistical agencies in the Central Government have been absorbed in the provinces. Temporary organizations are compiling Agriculture, Population and Housing Censuses.
3. <u>Heads of Key Agencies</u>	C.S.O. had first 3 U.S. Statistical Advisors as its Acting Director. The East Pakistan .. Board and Bureau .. had as its first Director, Dr. A. Sadique, the Population Census Commissioner was Col. E.H. Slade, U.K. (under contract to G.O.P.)	The present able Director-General of C.S.O. has served for over three years and Government seems to have accepted full responsibility for administration and direction of this key agency. The West Pakistan Bureau of Statistics has had from its beginning a competent Pakistani Director. The East Pakistan Bureau has, since Dr. Sadique's death, had C.S.P. part time Directors. All of above have had some U.S. training. Completion of Population and Agriculture Censuses is now incharge of able deputies (also U.S. trained).

Components	1951 Status	1963 Status
4. <u>Sampling Facilities</u>	None	National Sample Survey was inaugurated by C.S.O. in 1959 and now has the experience of 9 "rounds" of enquiries. Limited at first to a rural village sample, it will collect from May 1963, on an urban - rural sample of 6500 households, data on labor force, income and expenditure, and changes in household composition (for migration patterns and net population increase).
C. <u>Administrative Factors</u>		
1. Pay and Status	No statistical service for professional and technical staff.	Draft Recruitment Rules which would have improved the pay and status of statisticians were presented to G.O.P. in 1954 but never promulgated. The recommendations in the Report of the Pay and Services Commission, 1962, likewise seem to have little prospect of acceptance. Posts of Directors of the Provincial Bureaus of Statistics are at reasonable level. The pay of the Director-General of C.S.O. has never been fixed, the two incumbents drawing previous salary plus very nominal special pay. The Census Commissioners in 1961 were granted pay and status of Joint Secretaries.
2. <u>Office space for Statistical Agencies</u>	C.S.O. was installed in two temporary sheds in the Secretariat. The East Pakistan .. Board and	The East Pakistan Bureau of Statistics is still in sheds, but promised space in the new air-conditioned Eden Building.

Components	1951 Status	1963 Status
	Bureau .. likewise.	After brief improvement in 1957-60 when CSO occupied 2 floors of a modern office building, its situation has retrogressed to occupancy of three residential bungalows. The West Pakistan Bureau of Statistics has just moved into a new building well suited to requirements of its data processing center.
D. Bench Mark Censuses <u>Censuses</u>		
(1) Population	First decennial census of Population taken in Pakistan	Second Census of Population taken as of January 31, 1961. Four of key staff had been U.S. participant trainees in the inter-censal period. Tabulation nearing completion. Principal Statistical Advisor is ex-officio Census Advisor, shares technical responsibility for the publication program - 5 bulletins (now all released) and 77 bound volume reports (16 now published) with the Acting Commissioner.
(2) Housing	None	Taken in conjunction with, but preceding Population Census of 1961. Tabulation complete. Reports (3) being written.

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Components	1951 Status	1963 Status
(3) Agriculture	None	<p>After a Census of livestock in West Pakistan in 1955, full scale Census of Agriculture was planned for 1959 but cut back to a still extensive sample, completed in both East and West Pakistan in 1960. Preliminary estimates promptly issued. Final tabulations, long delayed, will still provide useful information. U.S. advisors have helped on organizational planning, sample design, and analysis. Early and effective counsel on tabulation operations was given by a Colombo Plan advisor.</p>
(4) Industry	None	<p>Regular Censuses of manufacturing Industries taken by CSO since 1954. Provincial Small Industries Corps have listed enumerated cottage industries in 1962.</p>
(5) Distributive Business (Retail, Wholesale, Service Trades)	None	<p>A first Census of Commercial establishments in urban centers undertaken by CSO and provincial Bureaus in 1963. Hyderabad and Karachi completed by February.</p>
E. Staff Training 1. Foreign Training	<p>CSO had 2 (out of 6) Division Chiefs who had M.A.'s from American Universities. Director of the East Pak. Board and Bureau had Ph.D. from London School of Economics.</p>	<p>26 have gone abroad for study under US programs; 13 under Colombo Plan, UN or other sponsored efforts. Of the 39, 22 are assigned to posts where they are demonstrating value of their training.</p>

Components	1951 Status	1963 Status
2. <u>In-Service Training</u>	None	Comprehensive program at all levels developed for CSO. Implementation awaits assignment of full time training officer, returned from his training in Phillipinas but temporarily diverted to other responsibilities.
3. Institutional	Institute (really a teaching department) of Statistics, University of Punjab; Boards of Economic Enquiry, Lahore and Peshawar.	University of Dacca (Statistical Survey Research Unit since 1961, up graded to Statistical Institute of Research and Training, 1963); Institute of Development Economics, 1959. Social Sciences Research Center, University of the Punjab, 1960; Institute of Business Admin, University of Karachi, 1954; University of Rajshahi, Dept. of Statistics, 1962. Outurn of M.A's and M.Sc.'s from above institutions now about 120 per year. Some 800 - 1000 others have some course work or exposure to statistical method. Two new Depts. of Statistics (E. Pak. Agriculture University and University of Karachi) will open in 1963.
F. <u>Technical & Program Improvements</u>		
1. Current Agricultural Production	Pyramidal reporting through land revenue assessors in West Pakistan and Union Agricultural Assistants in East Pakistan produced adjusted estimates long after crop season was past.	In West Pakistan crop reports are directly mailed and machine tabulated by the Bureau of Statistics - now timely. In East Pakistan, Provincial Statistical Advisor has organized and trained the tech. staff of Directorate of Agriculture who are now conducting sample surveys of acreage and harvest yield on all major crops.

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Components	1951 Status	1963 Status
2. Trade Statistics	Minimal classification	Improvement in quality, (much more detailed classification) and timing.
3. Price Statistics	None except agricultural commodity prices at secondary markets.	Revised Wholesale Price Index. Retail prices collected from selected urban places. Needs weighting from new N.S.S. sample to construct valid cost of living indices.
4. Manpower and Labour Statistics	Only administrative statistics collected by Factory Inspectors. Non-agricultural labour force from 1951 Census - broad categories.	Census of Manufacturing Industries (since 1954) has provided employment data for large plants. Establishment Surveys of Ministry of Labour (now discontinued) to be superseded by Censuses of Commercial Establishments will provide business employment data. National Sample Survey now is best hope for overall current labor force data.
5. Vital and Health Statistics	Birth and Death occurrences recorded by village chowkidars and municipal health authorities were badly under reported.	Vital statistics, now official responsibility of Union Councils, are even less complete. CSO (under Population Council sponsorship) now conducting a methodological study of population growth estimation. WHO Health Statistics Advisor has developed a system of uniform reporting from dispensaries, out patient clinics and hospitals.

Components	1951 Status	1963 Status
6. Educational Statistics	Uneven and unreliable reporting of enrollment. Out turn figures of institutions generally dependable.	Comparability of enrollment data through Prov. Directorates still poor. A UNESCO Advisor (sixth in 5 years) has proposed a minimal system of reporting enrollment, faculty qualifications, and school finances.
7. National Accounts	None	National income in constant prices has been estimated by CSO since 1957. U.S. Advisor in 1956-57, 4 participant trainees to U.S. (only 1 now working in the field. Expert Committee on National Accounts in 1962 made specific recommendations for conceptual improvement.
Statistical Library	None	CSO Library has had steady growth through project assistance and Asia Foundation gifts and UN acquisitions. Over 2000 volumes, 200 exchange publications.
9. Production Standards	None in effect	Population and Agriculture Censuses established and maintained reasonable standards following work measurement studies of processing operations. C.S.O. has recently acquired an O. & M. technician trained in setting production standards.

Components	Status in 1951	1963 Status
10. Mechanization	Only occupation and industry data of 1951 Census tabulated on Powers-Samas punched card equipment.	All current work of any volume in CSO and Provincial Statistical Bureaus is on punched card tabulating equipment. C.S.O. and the West Pakistan Bureau have modern IBM hardware. The East Pakistan Bureau has obsolete Powers-Samas equipment.
11. Timeliness of CSO publications	Average time lag of 3 months between receipt of currently reported data and its publication.	Time lag reduced to average 3-4 weeks due to better work scheduling, own reproduction unit.
G. Financing (Annual approp.)	Exclusive of Census appropriation, Rs.1280 thousand on identifiable statistical agency activities.	Exclusive of population, Housing and Agriculture Censuses, Rs.4240 thousand for same agencies plus 3 new provincial units.

VII. Mission Director's Concurrence or Consent**Concur.**